EAST 10/018,320 LCM
12/18/05

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L4	5	"018320".ap.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/12/18 12:29
S1	5	"018320".ap.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/12/18 12:29
S2	0	"6914049.pn"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/12/16 13:23
S3	0	"6914049.pn."	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/12/16 13:23
S4	3	"6914049".pn.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/12/16 14:39
S5	56	((cytochrome adj P450 adj 2D6) or hCYP2D6) and allele	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/12/16 16:13
S6	1	(hCYP2D6*1 or hCYP2D6*2 or hCYP2D6*9 or hCYP2D6*10 or hCYP2D6*17) and allele	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/12/16 15:03
S7	8	S5 and @ad<"20000314"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/12/16 16:02
S8	0	S6 and S7	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/12/16 14:43
S9	0	S7 and ((chinese adj hamster adj lung adj fibroblast) or v79 or (v79 adj cells) or (chinese adj hamster adj fibroblast))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/12/16 15:04

S10	1	(V79MZh2D6*1 or V79MZh2D6*2 or V79MZh2D6*9 or V79MZh2D6*10 or V79MZh2D6*17)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/12/16 14:49
S11	1276	screen$3 and ((cytochrome adj P450 adj 2D6) or hCYP2D6 or CYP2D6)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/12/16 16:14
S12	141	S11 and @ad<"20000314"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/12/16 14:55
S13	128	S12 and (metabolism or metabolic or metabolize)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/12/16 16:12
S14	131	S12 and (metabolism or metabolic or metabolize or metabolite)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/12/16 14:56
S15	90	S14 and (((gene adj dependent adj toxicity) or carcingen$3 or oncogen$3 or mutagen$3) and (drugs or compound or substance))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/12/16 16:12
S16	81	S15 and (((cytochrome adj P450 adj 2D6) or hCYP2D6 or CYP2D6) and allele)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/12/16 15:01
S17	0	S16 and (hCYP2D6*1 or hCYP2D6*2 or hCYP2D6*9 or hCYP2D6*10 or hCYP2D6*17)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/12/16 15:02
S18	13	((cytochrome adj P450 adj 2D6) or hCYP2D6) and heterologous	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/12/16 15:03
S19	2	S18 and @ad<"20000314"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/12/16 15:03

S20	0	S19 and (hCYP2D6*1 or hCYP2D6*2 or hCYP2D6*9 or hCYP2D6*10 or hCYP2D6*17)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/12/16 15:03
S21	0	S19 and ((chinese adj hamster adj lung adj fibroblast) or v79 or (v79 adj cells) or (chinese adj hamster adj fibroblast))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/12/16 15:04
S22	866	((cytochrome adj P450 adj 2D6) or hCYP2D6 or CYP2D6 or CYP-2D6 or (CYP adj 2D6)) and allele and heterologous	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/12/16 16:13
S23	79	S22 and @ad<"20000314"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/12/16 16:03
S24	915	((cytochrome adj P450 adj 2D6) or hCYP2D6 or CYP2D6 or CYP-2D6 or (CYP adj 2D6)) and heterologous	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/12/16 16:05
S25	1062	((cytochrome adj P450 adj 2D6) or hCYP2D6 or CYP2D6 or CYP-2D6 or (CYP adj 2D6)) and allele	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/12/16 16:03
S26	91	S24 and @ad<"20000314"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/12/16 16:06
S27	79	S26 and allele	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/12/16 16:06
S28	1	((cytochrome adj P450 adj 2D6) or hCYP2D6 or CYP2D6 or CYP-2D6 or (CYP adj 2D6)) near heterologous	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/12/16 16:06
S29	16	((cytochrome adj P450 adj 2D6) or hCYP2D6 or CYP2D6 or CYP-2D6 or (CYP adj 2D6)) same heterologous	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/12/16 16:05

S30	13	S29 and allele	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/12/16 16:07
S31	0	S30 and @ad<"20000314"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/12/16 16:07
S32	0	((cytochrome adj P450 adj 2D) or hCYP2D or CYP2D or CYP-2D or (CYP adj 2D)) near heterologous	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/12/16 16:10
S33	0	((cytochrome adj P450 adj 2D) or hCYP2D or CYP2D or CYP-2D or (CYP adj 2D)) same heterologous	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/12/16 16:07
S34	52	((cytochrome adj P450 adj 2D) or hCYP2D or CYP2D or CYP-2D or (CYP adj 2D)) and heterologous	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/12/16 16:07
S35	7	S34 and @ad<"20000314"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/12/16 16:11
S36	4	S35 and allele	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/12/16 16:16
S37	0	((cytochrome adj P450) same allele) near heterologous	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/12/16 16:11
S38	0	((cytochrome adj P450) near allele) near heterologous	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/12/16 16:11
S39	0	((cytochrome adj P450) and allele) near heterologous	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/12/16 16:11

S40	1718	((cytochrome adj P450) and allele) and heterologous	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/12/16 16:16
S41	176	S40 and @ad<"20000314"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/12/16 16:16
S42	154	S41 and (metabolism or metabolic or metabolize)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/12/16 16:12
S43	108	S42 and (((gene adj dependent adj toxicity) or carcingen$3 or oncogen$3 or mutagen$3) and (drugs or compound or substance))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/12/16 16:12
S44	0	((cytochrome adj P450 adj 2D6) or hCYP2D6) and S43	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/12/16 16:13
S45	70	((cytochrome adj P450 adj 2D6) or hCYP2D6 or CYP2D6 or CYP-2D6 or (CYP adj 2D6)) and S43	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/12/16 16:13
S46	107	screen$3 and S43	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/12/16 16:14
S47	70	screen$3 and S45	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/12/16 16:14
S48	14	((cytochrome adj P450) near allele)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/12/16 16:16
S49	4	S48 and heterologous	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/12/16 16:16

S50	0	S49 and @ad<"20000314"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/12/16 17:41
S51	1	(emulgen adj "913") and (cytochrome adj p450) and (((carbon adj monoxide) or CO) near (spectra or spectrum))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/12/16 17:41
S52	1	(emulgen adj "913") and (cytochrome adj p450) and (reduced adj spectrum) and (((carbon adj monoxide) or CO) near (spectra or spectrum))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/12/16 17:41
S53	9	(emulgen adj "913") and (cytochrome adj p450)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/12/16 17:40
S54	6	S53 and @ad<"20000314"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/12/16 17:41
S55	0	S54 and (((carbon adj monoxide) or CO) near (spectra or spectrum))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/12/16 17:46
S56	0	S54 and (reduced adj spectrum)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/12/16 17:41
S57	5	S54 and (difference adj spectra)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/12/16 17:46

Dialog 12/18/05
LLM 10/018,320

```
Trying 31060000009999...Open

DIALOG INFORMATION SERVICES
PLEASE LOGON:
 ******** HHHHHHHH SSSSSSSS? ### Status: Signing onto Dialog ********
ENTER PASSWORD:
 ******** HHHHHHHH SSSSSSSS?  ********
### Status: Login successfulWelcome to DIALOG

Dialog level 05.09.03D

Last logoff:  15dec05 15:18:28
Logon file405 18dec05 10:39:51
           *** ANNOUNCEMENT ***
                     ***
NEW FILES RELEASED
***Index Chemicus (File 302)
***Inspec (File 202)
***Physical Education Index (File 138)
***Computer and Information Systems Abstracts (File 56)
***Electronics and Communications Abstracts (File 57)
***Solid State and Superconductivity Abstracts (File 68)
***ANTE: Abstracts in New Technologies (File 60)
                     ***
RELOADS COMPLETED
*** The 2005 reload of the CLAIMS files (Files 340, 341, 942)
is now available online.

RESUMED UPDATING
***ERIC (File 1)
                     ***
Chemical Structure Searching now available in Prous Science Drug
Data Report (F452), Prous Science Drugs of the Future (F453),
IMS R&D Focus (F445/955), Pharmaprojects (F128/928), Beilstein
Facts (F390), Derwent Chemistry Resource (F355) and Index Chemicus
(File 302).
                     ***
     >>> Enter BEGIN HOMEBASE for Dialog Announcements <<<
     >>>    of new databases, price changes, etc.      <<<
                     ****
* * *
SYSTEM:HOME
Cost is in DialUnits
Menu System II: D2 version 1.7.9 term=ASCII
                       *** DIALOG HOMEBASE(SM) Main Menu ***

 Information:
  1.  Announcements (new files, reloads, etc.)
  2.  Database, Rates, & Command Descriptions
  3.  Help in Choosing Databases for Your Topic
  4.  Customer Services (telephone assistance, training, seminars, etc.)
  5.  Product Descriptions

 Connections:
  6.  DIALOG(R) Document Delivery
  7.  Data Star(R)

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      /H = Help            /L = Logoff          /NOMENU = Command Mode
```

```
Enter an option number to view information or to connect to an online
 service.  Enter a BEGIN command plus a file number to search a database
(e.g., B1 for ERIC).
?
Terminal set to DLINK
                    *** DIALOG HOMEBASE(SM) Main Menu ***

 Information:
  1.  Announcements (new files, reloads, etc.)
  2.  Database, Rates, & Command Descriptions
  3.  Help in Choosing Databases for Your Topic
  4.  Customer Services (telephone assistance, training, seminars, etc.)
  5.  Product Descriptions

 Connections:
  6.  DIALOG(R) Document Delivery
  7.  Data Star(R)

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      /H = Help            /L = Logoff          /NOMENU = Command Mode


Enter an option number to view information or to connect to an online
 service.  Enter a BEGIN command plus a file number to search a database
(e.g., B1 for ERIC).
? b biosci

>>>          44 is unauthorized
>>>          76 is unauthorized
>>>2 of the specified files are not available
       18dec05 10:40:11 User276741 Session D71.1
            $0.00    0.230 DialUnits FileHomeBase
     $0.00  Estimated cost FileHomeBase
     $0.08  TELNET
     $0.08  Estimated cost this search
     $0.08  Estimated total session cost   0.230 DialUnits


SYSTEM:OS  - DIALOG OneSearch
  File   5:Biosis Previews(R) 1969-2005/Dec W2
         (c) 2005 BIOSIS
  File  24:CSA Life Sciences Abstracts 1966-2005/Nov
         (c) 2005 CSA.
  File  28:Oceanic Abstracts 1966-2005/Nov
         (c) 2005 CSA.
  File  34:SciSearch(R) Cited Ref Sci 1990-2005/Dec W2
         (c) 2005 Inst for Sci Info
  File  35:Dissertation Abs Online 1861-2005/Nov
         (c) 2005 ProQuest Info&Learning
  File  40:Enviroline(R) 1975-2005/Jul
  File  41:Pollution Abstracts 1966-2005/Nov
         (c) 2005 CSA.
  File  50:CAB Abstracts 1972-2005/Nov
         (c) 2005 CAB International
  File  65:Inside Conferences 1993-2005/Dec W2
         (c) 2005 BLDSC all rts. reserv.
  File  71:ELSEVIER BIOBASE 1994-2005/Dec W2
         (c) 2005  Elsevier Science B.V.
  File  73:EMBASE 1974-2005/Dec 16
```

(c) 2005 Elsevier Science B.V.
File 91:MANTIS(TM) 1880-2005/Jun
2001 (c) Action Potential
File 94:JICST-EPlus 1985-2005/Oct W2
(c)2005 Japan Science and Tech Corp(JST)
File 98:General Sci Abs/Full-Text 1984-2004/Dec
(c) 2005 The HW Wilson Co.
File 110:WasteInfo 1974-2002/Jul
(c) 2002 AEA Techn Env.
***File 110: This file is closed (no updates)**
File 135:NewsRx Weekly Reports 1995-2005/Dec W2
(c) 2005 NewsRx
***File** 135: Please see HELP NEWS135 for information on select
journal titles.
File 136:BioEngineering Abstracts-1966-2005/Nov (c) 2005 CSA.
File 143:Biol. & Agric. Index 1983-2005/Sep
(c) 2005 The HW Wilson Co
File 144:Pascal 1973-2005/Dec W1
(c) 2005 INIST/CNRS
File 155:MEDLINE(R) 1951-2005/Dec 07
(c) format only 2005 Dialog
***File 155: Medline has ceased updating as of UD 20051207, until e**
the reload is complete. Please see HELP NEWS 154 for details.
File 164:Allied & Complementary Medicine 1984-2005/Dec
(c) 2005 BLHCIS
File 172:EMBASE Alert 2005/Dec 16
(c) 2005 Elsevier Science B.V.
File 185:Zoological Record Online(R) 1978-2005/Dec
(c) 2005 BIOSIS
File 357:Derwent Biotech Res. _1982-2005/Dec W3
(c) 2005 Thomson Derwent & ISI
File 369:New Scientist 1994-2005/Aug W2
(c) 2005 Reed Business Information Ltd.
File 370:Science 1996-1999/Jul W3
(c) 1999 AAAS
***File 370: This file is closed (no updates). Use File 47 for more current**
information.
File 391:Beilstein Reactions 2005/Q2
(c) 2005 Beilstein GmbH
File 434:SciSearch(R) Cited Ref Sci 1974-1989/Dec
(c) 1998 Inst for Sci Info
File 467:ExtraMED(tm) 2000/Dec
(c) 2001 Informania Ltd.
***File 467: F467 no longer updates; see Help News467.** 7.

Set	Items	Description

? s ((cytochrome (w) P450 (w) 2D6) or hCYP2D6 or CYP2D6 or CYP-2D6 or (CYP (w)
2D6)) (n) heterologous

	523248	CYTOCHROME
	182280	P450
	7900	2D6
	4389	CYTOCHROME(W)P450(W)2D6
	0	HCYP2D6
	14594	CYP2D6
	1	CYP-2D6
	28396	CYP
	7900	2D6
	855	CYP(W)2D6
	201138	HETEROLOGOUS
S1	2	((CYTOCHROME (W) P450 (W) 2D6) OR HCYP2D6 OR CYP2D6 OR

```
                  CYP-2D6 OR (CYP (W) 2D6)) (N) HETEROLOGOUS
? s s1 and allele
                2  S1
           377896  ALLELE
      S2        0  S1 AND ALLELE
? s (hCYP2D6*1 or  hCYP2D6*2 or  hCYP2D6*9 or  hCYP2D6*10  or  hCYP2D6*17) and
allele
                0  HCYP2D6
         28655803  1
                0  HCYP2D6
         30080941  2
                0  HCYP2D6
          6561683  9
                0  HCYP2D6
          9403086  10
                0  HCYP2D6
          2647708  17
           377896  ALLELE
      S3        0  (HCYP2D6*1 OR  HCYP2D6*2 OR  HCYP2D6*9 OR  HCYP2D6*10  OR
                   HCYP2D6*17) AND ALLELE
? s (hCYP2D6(w)1 or  hCYP2D6(w)2 or  hCYP2D6(w)9 or  hCYP2D6(w)10  or  hCYP2D6
(w)17) and allele
                0  HCYP2D6
         28655803  1
                0  HCYP2D6(W)1
                0  HCYP2D6
         30080941  2
                0  HCYP2D6(W)2
                0  HCYP2D6
          6561683  9
                0  HCYP2D6(W)9
                0  HCYP2D6
          9403086  10
                0  HCYP2D6(W)10
                0  HCYP2D6
          2647708  17
                0  HCYP2D6(W)17
           377896  ALLELE
      S4        0  (HCYP2D6(W)1 OR  HCYP2D6(W)2 OR  HCYP2D6(W)9 OR
                   HCYP2D6(W)10 OR  HCYP2D6(W)17) AND ALLELE
? s ((cytochrome (w) P450 (w) 2D) or hCYP2D or CYP2D or CYP-2D or (CYP (w)
2D)) and heterologous
           523248  CYTOCHROME
           182280  P450
           190563  2D
              247  CYTOCHROME(W)P450(W)2D
                0  HCYP2D
             1292  CYP2D
                0  CYP-2D
            28396  CYP
           190563  2D
               92  CYP(W)2D
           201138  HETEROLOGOUS
      S5       13  ((CYTOCHROME (W) P450 (W) 2D) OR HCYP2D OR CYP2D OR
                   CYP-2D OR (CYP (W) 2D)) AND HETEROLOGOUS
? s s5 and allele
               13  S5
           377896  ALLELE
      S6        2  S5 AND ALLELE
? rd
```

>>>Duplicate detection is not supported for File 391.

>>>Records from unsupported files will be retained in the RD set.
S7 2 RD (unique items)
? s s7 not pd>000314
>>>File 24 processing for PD=000314 : PD=|
>>> started at PD=20000315 stopped at PD=99880000
>>>File 34 processing for PD=000314 : PD=|
>>> started at PD=20000315 stopped at PD=20050812
>>>One or more prefixes are unsupported
>>> or undefined in one or more files.
>>>File 73 processing for PD=000314 : PD=|
>>> started at PD=000315 stopped at PD=051119
Processing
Processed 10 of 29 files ...
>>>File 144 processing for PD=000314 : PD=|
>>> started at PD=20000315 stopped at PD=20050726
Completed processing all files
2 S7
14196525 PD>000314
S8 2 S7 NOT PD>000314
? type s8/medium,k/1-2

8/K/1 (Item 1 from file: 34)
DIALOG(R)File 34:SciSearch(R) Cited Ref Sci

04369150 Genuine Article#: RY558 No. References: 22
Title: AN UNEQUAL CROSS-OVER EVENT WITHIN THE CYP2D **GENE-CLUSTER GENERATES A CHIMERIC CYP2D7/CYP2D6 GENE WHICH IS ASSOCIATED WITH THE POOR METABOLIZER PHENOTYPE**
Author(s): PANSERAT S; MURA C; GERARD N; VINCENTVIRY M; GALTEAU MM; JACQZAIGRAIN E; KRISHNAMOORTHY R
Corporate Source: HOP ROBERT DEBRE,INSERM,U120,48 BLVD SERURIER/F-75019 PARIS//FRANCE/; HOP ROBERT DEBRE,INSERM,U120/F-75019 PARIS//FRANCE/; HOP ROBERT DEBRE,DEPT PHARMACOL CLIN/F-75019 PARIS//FRANCE/; CNRS,URA 597,LAB CTR MED PREVENT/VANDOEUVRE NANCY//FRANCE/
Journal: BRITISH JOURNAL OF CLINICAL PHARMACOLOGY, 1995, V40, N4 (OCT), P 361-367
ISSN: 0306-5251
Language: ENGLISH Document Type: ARTICLE (Abstract Available)

Request from STIC

Title: AN UNEQUAL CROSS-OVER EVENT WITHIN THE CYP2D **GENE-CLUSTER GENERATES A CHIMERIC CYP2D7/CYP2D6 GENE WHICH IS ASSOCIATED WITH THE POOR METABOLIZER...**
Abstract: 1 The study of the **CYP2D** genotype and phenotype of a Caucasian family revealed that a XbaI-9 kb **allele** was associated with the poor metabolizer phenotype.

2 A Polymerase Chain Reaction (PCR)-based assay...

...the previously described mutations D6A and D6B are not associated with the XbaI-9 kb **allele** .

3 To explore the molecular basis of the poor metabolizer phenotype associated with the XbaI-9 kb **allele** , complete sequencing of the nine exons and intron-exon boundaries of the CYP2D6 gene was...

...primer.

5 Sequence data derived from this amplified product revealed that the XbaI-9 kb **allele** corresponds to a novel rearrangement of the locus. This involved a deletion of an approximately...
...Research Fronts: EPILEPSY; DEBRISOQUINE METABOLIC PHENOTYPE; ANTIEPILEPTIC DRUGS; MEPHENYTOIN OXIDATION POLYMORPHISMS; IN-VITRO MODEL)
93-4847 001 (**HETEROLOGOUS** EXPRESSION; CHROMOSOMAL DNA; GENE ENCODING METHYLMALONYL-COENZYME-A MUTASE)

8/K/2 (Item 1 from file: 98)
DIALOG(R)File 98:General Sci Abs/Full-Text

04007592 H.W. WILSON RECORD NUMBER: BGSI99007592 (USE FORMAT 7 FOR FULLTEXT)
Cytochromes P450 and species differences in xenobiotic metabolism and activation of carcinogen.
Lewis, David F. V
Ioannides, Costas; Parke, Dennis V
Environmental Health Perspectives (Environ Health Perspect) v. 106 no10 (Oct. 1998) p. 633-41
SPECIAL FEATURES: bibl il ISSN: 0091-6765
LANGUAGE: English
COUNTRY OF PUBLICATION: United States
WORD COUNT: 8637

(USE FORMAT 7 FOR FULLTEXT)

TEXT:
... recent advances in molecular biological techniques that enable the stable expression of human P450s in **heterologous** systems, together with test procedures for genotyping an individual's P450 complement, point the way...be potentially useful for differentiating between substrates of different P450 isozymes, primarily CYP3A, CYP2C, and **CYP2D** isoforms, as these constitute the P450 enzymes in human liver that metabolize the large majority...values of P450 substrates are greater than zero, although there are exceptions, such as some **CYP2D** and CYP2E substrates. CYP2D6 substrates usually possess a protonatable nitrogen atom 5-7 A from...C, Brockmoller J, Bauer S, Roots I. Cytochrome P450 2D6 variants in a caucasian population: **allele** frequencies and phenotypic consequences. Am J Hum Genet 60:284-295 (1997).
55. Lewis DFV...
? ds

Set	Items	Description
S1	2	((CYTOCHROME (W) P450 (W) 2D6) OR HCYP2D6 OR CYP2D6 OR CYP--2D6 OR (CYP (W) 2D6)) (N) HETEROLOGOUS
S2	0	S1 AND ALLELE
S3	0	(HCYP2D6*1 OR HCYP2D6*2 OR HCYP2D6*9 OR HCYP2D6*10 OR HCYP2D6*17) AND ALLELE
S4	0	(HCYP2D6(W)1 OR HCYP2D6(W)2 OR HCYP2D6(W)9 OR HCYP2D6(W-)10 OR HCYP2D6(W)17) AND ALLELE
S5	13	((CYTOCHROME (W) P450 (W) 2D) OR HCYP2D OR CYP2D OR CYP-2D OR (CYP (W) 2D)) AND HETEROLOGOUS
S6	2	S5 AND ALLELE
S7	2	RD (unique items)
S8	2	S7 NOT PD>000314

? s (V79MZh2D6*1 or V79MZh2D6*2 or V79MZh2D6*9 or V79MZh2D6*10 or V79MZh2D6*17)

```
            0  V79MZH2D6
     28655803  1
            0  V79MZH2D6
     30080941  2
            0  V79MZH2D6
      6561683  9
            0  V79MZH2D6
      9403086  10
            0  V79MZH2D6
      2647708  17
   S9       0  (V79MZH2D6*1 OR V79MZH2D6*2 OR V79MZH2D6*9 OR
               V79MZH2D6*10 OR V79MZH2D6*17)
? s ((chinese (w) hamster (w) lung (w) fibroblast) or v79 or (v79 (w) cells)
or (chinese (w) hamster (w) fibroblast))
Processing
Processed  20 of  29 files ...
Sending Break...
?s ((chinese (w) hamster (w) lung (w) fibroblast) or (v79 (w) cells) or
(chinese (w) hamster (w) fibroblast))
Processing
       418733  CHINESE
       353485  HAMSTER
      1868728  LUNG
       394327  FIBROBLAST
         1099  CHINESE(W)HAMSTER(W)LUNG(W)FIBROBLAST
        19964  V79
      9813566  CELLS
        11588  V79(W)CELLS
       418733  CHINESE
       353485  HAMSTER
       394327  FIBROBLAST
          925  CHINESE(W)HAMSTER(W)FIBROBLAST
   S10  13319  ((CHINESE (W) HAMSTER (W) LUNG (W) FIBROBLAST) OR (V79
               (W) CELLS) OR (CHINESE (W) HAMSTER (W) FIBROBLAST))
? s s10 and ((cytochrome (w) P450 (w) 2D) or hCYP2D or CYP2D or CYP-2D or (CYP
(w) 2D)) and heterologous
       13319  S10
      523248  CYTOCHROME
      182280  P450
      190563  2D
         247  CYTOCHROME(W)P450(W)2D
           0  HCYP2D
        1292  CYP2D
           0  CYP-2D
       28396  CYP
      190563  2D
          92  CYP(W)2D
      201138  HETEROLOGOUS
   S11       0  S10 AND ((CYTOCHROME (W) P450 (W) 2D) OR HCYP2D OR CYP2D
               OR CYP-2D OR (CYP (W) 2D)) AND HETEROLOGOUS
? s ((emulgen (w) 913) or (non-ionic (w) detergent)) and (cytochrome (w) P450)
and  (reduced (w) spectr??)
         544  EMULGEN
        7269  913
         212  EMULGEN(W)913
        1812  NON-IONIC
      145289  DETERGENT
           0  NON-IONIC(W)DETERGENT
      523248  CYTOCHROME
      182280  P450
      165643  CYTOCHROME(W)P450
```

```
         3861799  REDUCED
         2764048  SPECTR??
             965  REDUCED(W)SPECTR??
     S12       0  ((EMULGEN (W) 913) OR (NON-IONIC (W) DETERGENT)) AND
                  (CYTOCHROME (W) P450) AND  (REDUCED (W) SPECTR??)
? s ((emulgen (w) 913) or (non-ionic (w) detergent)) and (cytochrome (w) P450)
             544  EMULGEN
            7269  913
             212  EMULGEN(W)913
            1812  NON-IONIC
          145289  DETERGENT
               0  NON-IONIC(W)DETERGENT
          523248  CYTOCHROME
          182280  P450
          165643  CYTOCHROME(W)P450
     S13      87  ((EMULGEN (W) 913) OR (NON-IONIC (W) DETERGENT)) AND
                  (CYTOCHROME (W) P450)
? s s13 and (((carbon (w) monoxide) or CO) or (CO/reduced (w) spectrum))
>>>Term "REDUCED" is not defined in one or more files
              87  S13
         2313423  CARBON
          217224  MONOXIDE
          187872  CARBON(W)MONOXIDE
         3308130  CO
         3308130  CO/REDUCED
         1254983  SPECTRUM
             226  CO/REDUCED(W)SPECTRUM
     S14       9  S13 AND (((CARBON (W) MONOXIDE) OR CO) OR (CO/REDUCED (W)
                  SPECTRUM))
? rdd
>>>Unrecognizable Command
? rd

>>>Duplicate detection is not supported for File 391.

>>>Records from unsupported files will be retained in the RD set.
     S15       5  RD  (unique items)
? s s15 not pd>000314
>>>File 24 processing for PD=000314 : PD=|
>>>    started at PD=20000315 stopped at PD=99880000
>>>File 34 processing for PD=000314 : PD=|
>>>    started at PD=20000315 stopped at PD=20050812
>>>One or more prefixes are unsupported
>>>  or undefined in one or more files.
>>>File 73 processing for PD=000314 : PD=|
>>>    started at PD=000315 stopped at PD=051119
>>>File 144 processing for PD=000314 : PD=|
>>>    started at PD=20000315 stopped at PD=20050726
              5  S15
       14196525  PD>000314
     S16       3  S15 NOT PD>000314
? type s16/medium,k/all

 16/K/1     (Item 1 from file: 5)
DIALOG(R)File   5:Biosis Previews(R)
(c) 2005 BIOSIS. All rts. reserv.

0011797272   BIOSIS NO.: 199900056932
```
Preparation of highly purified cytochrome P4501A1 from leaping mullet (Liza saliens) liver microsomes and its biocatalytic, molecular and immunochemical properties

AUTHOR: Sen Alaattin; Arinc Emel (Reprint)
AUTHOR ADDRESS: Joint Grad. Program Biochem., Dep. Biol. Sci., Middle East Tech. Univ., 06531 Ankara, Turkey**Turkey
JOURNAL: Comparative Biochemistry and Physiology C Pharmacology Toxicology and Endocrinology 121 (1-3): p249-265 Nov., 1998 1998
MEDIUM: print
ISSN: 0742-8413
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

...ABSTRACT: Izmir Bay, Aegean coast of Turkey. Purification of cytochrome P4501A1 involved anion exchange chromatography of **Emulgen 913** -cholate solubilized microsomes on first- and second-DEAE-cellulose columns, hydrophobic interaction chromatographies of the...

...spectrum of the purified cytochrome P4501A1 fractions showed maximal absorption at 417.5 nm and **CO** -difference spectrum of dithionite-reduced cytochrome P4501A1 gave a peak at 448 nm. Purified P4501A1...

...in the 0-deethylation of 7-ethoxyresorufin in the reconstituted system containing purified fish liver **cytochrome P450** reductase and synthetic lipid. However, it was unable to catalyze the oxidation of the other...

16/K/2 (Item 1 from file: 73)
DIALOG(R)File 73:EMBASE

Request

02376474 EMBASE No: 1983201485
Multiple forms of cytochrome P-450 in kidney cortex microsomes of rabbits treated with 3-methylcholanthrene
Ogita K.; Kusunose E.; Ichihara K.; Kusunose M.
Toneyama Inst. Tuberc. Res., Osaka City Univ. Med. Sch., Toneyama, Toyonaka 560 Japan
Journal of Biochemistry (J. BIOCHEM.) (Japan) 1982, 92/3 (921-928)
CODEN: JOBIA
DOCUMENT TYPE: Journal
LANGUAGE: ENGLISH

...20 mM potassium phosphate buffer in the presence of 0.4% cholate and 0.08% **Emulgen 913** . This fraction was partially purified to a specific content of 4.49 nmol of cytochrome...

...1 M potassium phosphate buffer in the presence of 0.4% cholate and 0.08% **Emulgen 913** , was purified to a specific content of 12.0 nmol of cytochrome P-450/mg...

...58,000. This cytochrome P-450 showed a maximal peak at 448 nm in the **carbon monoxide** difference spectrum of its reduced form. Its absolute spectrum of the oxidized form had low...
DRUG DESCRIPTORS:
*3 methylcholanthrene; * **cytochrome p450**
CAS REGISTRY NO.: 56-49-5 (3 methylcholanthrene); 9035-51-2 (**cytochrome p450**)

16/K/3 (Item 2 from file: 73)
DIALOG(R)File 73:EMBASE

00748096 EMBASE No: 1977093470

Preparation and properties of partially purified pulmonary cytochrome P 450 from rabbits

Arinc E.; Philpot R.M.
Pharmacol. Branch, Nat. Inst. Environm. Hlth Sci., NIH, Research Triangle Park, N.C. 27709 United States

Journal of Biological Chemistry (J. BIOL. CHEM.) 1976, 251/11 (3213-3220)
CODEN: JBCHA
DOCUMENT TYPE: Journal
LANGUAGE: ENGLISH

...absence of glycerol. Further purification was achieved by chromatography on DEAE cellulose and hydroxylapatite using **Emulgen 913** as an eluent. Partially purified preparations containing up to 7.4 nmol of cytochrome P...

...reductase activity and cytochromes b$D5 and P 420. However, epoxide hydrase was found to **co** purify with cytochrome P 450. The **CO** difference spectrum of dithionite reduced purified cytochrome showed the expected peak at 450 nm. However...

DRUG DESCRIPTORS:
* **cytochrome p450**
CAS REGISTRY NO.: 9035-51-2 (**cytochrome p450**)

```
? ds

Set     Items   Description
S1          2   ((CYTOCHROME (W) P450 (W) 2D6) OR HCYP2D6 OR CYP2D6 OR CYP-
             -2D6 OR (CYP (W) 2D6)) (N) HETEROLOGOUS
S2          0   S1 AND ALLELE
S3          0   (HCYP2D6*1 OR HCYP2D6*2 OR HCYP2D6*9 OR HCYP2D6*10 OR
             HCYP2D6*17) AND ALLELE
S4          0   (HCYP2D6(W)1 OR HCYP2D6(W)2 OR HCYP2D6(W)9 OR HCYP2D6(W-
             )10 OR HCYP2D6(W)17) AND ALLELE
S5         13   ((CYTOCHROME (W) P450 (W) 2D) OR HCYP2D OR CYP2D OR CYP-2D
             OR (CYP (W) 2D)) AND HETEROLOGOUS
S6          2   S5 AND ALLELE
S7          2   RD (unique items)
S8          2   S7 NOT PD>000314
S9          0   (V79MZH2D6*1 OR V79MZH2D6*2 OR V79MZH2D6*9 OR V79MZH2D6*10
             OR V79MZH2D6*17)
S10     13319   ((CHINESE (W) HAMSTER (W) LUNG (W) FIBROBLAST) OR (V79 (W)
             CELLS) OR (CHINESE (W) HAMSTER (W) FIBROBLAST))
S11         0   S10 AND ((CYTOCHROME (W) P450 (W) 2D) OR HCYP2D OR CYP2D OR
              CYP-2D OR (CYP (W) 2D)) AND HETEROLOGOUS
S12         0   ((EMULGEN (W) 913) OR (NON-IONIC (W) DETERGENT)) AND (CYTO-
             CHROME (W) P450) AND (REDUCED (W) SPECTR??)
S13        87   ((EMULGEN (W) 913) OR (NON-IONIC (W) DETERGENT)) AND (CYTO-
             CHROME (W) P450)
S14         9   S13 AND (((CARBON (W) MONOXIDE) OR CO) OR (CO/REDUCED (W) -
             SPECTRUM))
S15         5   RD (unique items)
S16         3   S15 NOT PD>000314
? s (((emulgen (w) 913) or (non-ionic (w) detergent)) and (cytochrome (w)
P450) and (CO (w) difference (w) spectra))
             544  EMULGEN
            7269  913
             212  EMULGEN(W)913
            1812  NON-IONIC
```

```
          145289  DETERGENT
               0  NON-IONIC(W)DETERGENT
          523248  CYTOCHROME
          182280  P450
          165643  CYTOCHROME(W)P450
         3308130  CO
         2653324  DIFFERENCE
         1103503  SPECTRA
             447  CO(W)DIFFERENCE(W)SPECTRA
     S17       1  (((EMULGEN (W) 913) OR (NON-IONIC (W) DETERGENT)) AND
                  (CYTOCHROME (W) P450)  AND (CO (W) DIFFERENCE (W)
                  SPECTRA))
? type s17/medium,k/

 17/K/1     (Item 1 from file: 357)
DIALOG(R)File 357:Derwent Biotech Res.
(c) 2005 Thomson Derwent & ISI. All rts. reserv.
```

Parent

0278618 DBR Accession No.: 2002-02759 PATENT

Test system comprising cell expressing different cytochrome - P450 **2D6 alleles to investigate genetically caused metabolite toxicity and to determine toxic, mutagenic or carcinogenic effect of compounds - plasmid pSV450h2D6-asterisk-1-mediated human peptide gene transfer**

AUTHOR: Doehmer J; Krebsfaenger N; Eichelbaum M; Zanger U

CORPORATE SOURCE: Graefelfing, Germany.

PATENT ASSIGNEE: Doehmer J 2001

PATENT NUMBER: DE 10012220 PATENT DATE: 20010920 WPI ACCESSION NO.: 2001-626902 (200173)

PRIORITY APPLIC. NO.: DE 1012220 APPLIC. DATE: 20000314

NATIONAL APPLIC. NO.: DE 1012220 APPLIC. DATE: 20000314

LANGUAGE: German

Test system comprising cell expressing different cytochrome - P450 **2D6 alleles to investigate genetically caused metabolite toxicity and to determine toxic, mutagenic or carcinogenic...**

ABSTRACT: A test system containing cells expressing a human **cytochrome - P450** 2D6 allele heterolog and at least 3 P450 2D6 alleles is claimed. Also claimed are: drug screening for compounds that are metabolized by human **cytochrome - P450** 2D6, by contacting the cells of the test system with a substance and measuring metabolite...

... system; and quantifying chytochrome-P450 content by solubilizing P450 cytochromes with a non-ionizing surfactant **Emulgen 913** , centrifuging the mixture and then measuring by **CO difference spectra** . In an example, V7MZh2D6-asterisk-1, -asterisk-2, -asterisk-9, asterisk-10 and asterick-17...

DESCRIPTORS: ...9, plasmid pSV450h2D6-asterisk-10, plasmid pSV450h2D6-asterick-17, plasmid pSV2neo-DNA-mediated human recombinant **cytochrome - P450** 2D6 allele gene transfer, expression in V29MZ cell, appl. metabolite toxicity, mutagentic, carcinogenic effect mammal...

```
? rd

>>>Duplicate detection is not supported for File 391.

>>>Records from unsupported files will be retained in the RD set.
     S18       1  RD  (unique items)
? ds

Set     Items   Description
S1          2   ((CYTOCHROME (W) P450 (W) 2D6) OR HCYP2D6 OR CYP2D6 OR CYP-
```

```
             -2D6 OR (CYP (W) 2D6)) (N) HETEROLOGOUS
S2           0   S1 AND ALLELE
S3           0   (HCYP2D6*1 OR  HCYP2D6*2 OR  HCYP2D6*9 OR  HCYP2D6*10  OR
             HCYP2D6*17) AND ALLELE
S4           0   (HCYP2D6(W)1 OR  HCYP2D6(W)2 OR  HCYP2D6(W)9 OR  HCYP2D6(W-
             )10  OR  HCYP2D6(W)17) AND ALLELE
S5          13   ((CYTOCHROME (W) P450 (W) 2D) OR HCYP2D OR CYP2D OR CYP-2D
             OR (CYP (W) 2D)) AND HETEROLOGOUS
S6           2   S5 AND ALLELE
S7           2   RD  (unique items)
S8           2   S7 NOT PD>000314
S9           0   (V79MZH2D6*1 OR V79MZH2D6*2 OR V79MZH2D6*9 OR V79MZH2D6*10
             OR V79MZH2D6*17)
S10      13319   ((CHINESE (W) HAMSTER (W) LUNG (W) FIBROBLAST) OR (V79 (W)
             CELLS) OR (CHINESE (W) HAMSTER (W) FIBROBLAST))
S11          0   S10 AND ((CYTOCHROME (W) P450 (W) 2D) OR HCYP2D OR CYP2D OR
              CYP-2D OR (CYP (W) 2D)) AND HETEROLOGOUS
S12          0   ((EMULGEN (W) 913) OR (NON-IONIC (W) DETERGENT)) AND (CYTO-
             CHROME (W) P450) AND  (REDUCED (W) SPECTR??)
S13         87   ((EMULGEN (W) 913) OR (NON-IONIC (W) DETERGENT)) AND (CYTO-
             CHROME (W) P450)
S14          9   S13 AND (((CARBON (W) MONOXIDE) OR CO) OR (CO/REDUCED (W) -
             SPECTRUM))
S15          5   RD  (unique items)
S16          3   S15 NOT PD>000314
S17          1   (((EMULGEN (W) 913) OR (NON-IONIC (W) DETERGENT)) AND (CYT-
             OCHROME (W) P450)  AND (CO (W) DIFFERENCE (W) SPECTRA))
S18          1   RD  (unique items)
? b 411
       18dec05 11:00:28 User276741 Session D71.2
             $7.25    1.230 DialUnits File5
                $0.16  1 Type(s) in Format 95 (KWIC)
             $0.16  1 Types
      $7.41  Estimated cost File5
             $3.09    0.498 DialUnits File24
      $3.09  Estimated cost File24
             $0.93    0.149 DialUnits File28
      $0.93  Estimated cost File28
            $45.57    2.058 DialUnits File34
                $6.43  1 Type(s) in Format  3
             $6.43  1 Types
     $52.00  Estimated cost File34
             $0.64    0.156 DialUnits File35
      $0.64  Estimated cost File35
             $0.83    0.115 DialUnits File40
      $0.83  Estimated cost File40
             $0.76    0.122 DialUnits File41
      $0.76  Estimated cost File41
             $1.10    0.240 DialUnits File50
      $1.10  Estimated cost File50
             $0.36    0.095 DialUnits File65
      $0.36  Estimated cost File65
             $6.08    0.695 DialUnits File71
      $6.08  Estimated cost File71
            $14.59    1.372 DialUnits File73
                $5.88  2 Type(s) in Format  3
             $5.88  2 Types
     $20.47  Estimated cost File73
             $0.36    0.084 DialUnits File91
      $0.36  Estimated cost File91
             $0.90    0.256 DialUnits File94
```

```
     $0.90  Estimated cost File94
            $1.07    0.251 DialUnits File98
               $1.45  1 Type(s) in Format  3
            $1.45  1 Types
     $2.52  Estimated cost File98
            $0.36    0.063 DialUnits File110
     $0.36  Estimated cost File110
            $1.10    0.204 DialUnits File135
     $1.10  Estimated cost File135
            $0.76    0.122 DialUnits File136
     $0.76  Estimated cost File136
            $0.62    0.208 DialUnits File143
     $0.62  Estimated cost File143
            $4.61    1.023 DialUnits File144
     $4.61  Estimated cost File144
            $4.17    1.227 DialUnits File155
     $4.17  Estimated cost File155
            $0.33    0.095 DialUnits File164
     $0.33  Estimated cost File164
            $1.16    0.109 DialUnits File172
     $1.16  Estimated cost File172
            $0.72    0.118 DialUnits File185
     $0.72  Estimated cost File185
            $4.53    0.215 DialUnits File357
               $2.45  1 Type(s) in Format  3
            $2.45  1 Types
     $6.98  Estimated cost File357
            $0.31    0.088 DialUnits File369
     $0.31  Estimated cost File369
            $0.25    0.070 DialUnits File370
     $0.25  Estimated cost File370
            $0.00    0.140 DialUnits File391
     $0.00  Estimated cost File391
            $4.26    0.192 DialUnits File434
     $4.26  Estimated cost File434
            $0.36    0.057 DialUnits File467
     $0.36  Estimated cost File467
            OneSearch, 29 files, 11.256 DialUnits FileOS
     $5.60  TELNET
   $129.04  Estimated cost this search
   $129.12  Estimated total session cost  11.486 DialUnits

File 411:DIALINDEX(R)

DIALINDEX(R)
   (c) 2005 Dialog

*** DIALINDEX search results display in an abbreviated ***
*** format unless you enter the SET DETAIL ON command. ***
? s (((cytochrome (w) P450 (w) 2D6) or hCYP2D6 or CYP2D6 or CYP-2D6 or (CYP
(w) 2D6)) (n) heterologous)  and allele
>>>No files selected.  Use SET FILES to choose at least two files; then use
        SELECT alone to reissue this SELECT statement.
? sf allbiosci
   You have 81 files in your file list.
   (To see banners, use SHOW FILES command)
? s (((cytochrome (w) P450 (w) 2D6) or hCYP2D6 or CYP2D6 or CYP-2D6 or (CYP
(w) 2D6)) (n) heterologous)  and allele

Your SELECT statement is:
   s (((cytochrome (w) P450 (w) 2D6) or hCYP2D6 or CYP2D6 or CYP-2D6 or
```

(CYP (w) 2D6)) (n) heterologous) and allele

Items	File
Examined	50 files

No files have one or more items; file list includes 81 files.

? s (((cytochrome (w) P450 (w) 2D6) or hCYP2D6 or CYP2D6 or CYP-2D6 or (CYP (w) 2D6)) and heterologous) and allele

Your SELECT statement is:
s (((cytochrome (w) P450 (w) 2D6) or hCYP2D6 or CYP2D6 or CYP-2D6 or (CYP (w) 2D6)) and heterologous) and allele

Items	File
1	5: Biosis Previews(R)_1969-2005/Dec W2
6	34: SciSearch(R) Cited Ref Sci_1990-2005/Dec W2
1	71: ELSEVIER BIOBASE_1994-2005/Dec W2
1	73: EMBASE_1974-2005/Dec 16
1	94: JICST-EPlus_1985-2005/Oct W2
1	98: General Sci Abs/Full-Text_1984-2004/Dec
1	155: MEDLINE(R)_1951-2005/Dec 07
Examined	50 files
1	444: New England Journal of Med._1985-2005/Dec W1

8 files have one or more items; file list includes 81 files.

? b 4,34,71,73,94,98,155,444
18dec05 11:02:50 User276741 Session D71.3
$3.37 1.272 DialUnits File411
$3.37 Estimated cost File411
$0.80 TELNET
$4.17 Estimated cost this search
$133.29 Estimated total session cost 12.759 DialUnits

SYSTEM:OS - DIALOG OneSearch
File 4:INSPEC 1983-2005/Dec W2
(c) 2005 Institution of Electrical Engineers
File 34:SciSearch(R) Cited Ref Sci 1990-2005/Dec W2
(c) 2005 Inst for Sci Info
File 71:ELSEVIER BIOBASE 1994-2005/Dec W2
(c) 2005 Elsevier Science B.V.
File 73:EMBASE 1974-2005/Dec 16
(c) 2005 Elsevier Science B.V.
File 94:JICST-EPlus 1985-2005/Oct W2
(c)2005 Japan Science and Tech Corp(JST)
File 98:General Sci Abs/Full-Text 1984-2004/Dec
(c) 2005 The HW Wilson Co.
File 155:MEDLINE(R) 1951-2005/Dec 07
(c) format only 2005 Dialog
***File 155: Medline has ceased updating as of UD 20051207, until e**
the reload is complete. Please see HELP NEWS 154 for details.
File 444:New England Journal of Med. 1985-2005/Dec W1
(c) 2005 Mass. Med. Soc.

Set	Items	Description

? s (((cytochrome (w) P450 (w) 2D6) or hCYP2D6 or CYP2D6 or CYP-2D6 or (CYP

(w) 2D6)) and heterologous) and allele
289459 CYTOCHROME
108919 P450
5163 2D6
2898 CYTOCHROME(W)P450(W)2D6
0 HCYP2D6
9587 CYP2D6
1 CYP-2D6
17735 CYP
5163 2D6
568 CYP(W)2D6
120291 HETEROLOGOUS
217212 ALLELE
S1 12 (((CYTOCHROME (W) P450 (W) 2D6) OR HCYP2D6 OR CYP2D6 OR CYP-2D6 OR (CYP (W) 2D6)) AND HETEROLOGOUS) AND ALLELE
? rd
S2 9 RD (unique items)
? s s2 not pd>000314
>>>File 34 processing for PD=000314 : PD=|
>>> started at PD=20000315 stopped at PD=20050812
>>>File 73 processing for PD=000314 : PD=|
>>> started at PD=000315 stopped at PD=051119
>>>One or more prefixes are unsupported
>>> or undefined in one or more files.
9 S2
9989781 PD>000314
S3 7 S2 NOT PD>000314
? type s3/medium,k/1-7

3/K/1 (Item 1 from file: 34)
DIALOG(R)File 34:SciSearch(R) Cited Ref Sci
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07434814 Genuine Article#: 165HM No. References: 530
Title: Genetic polymorphisms of human N-acetyltransferase, cytochrome P450, glutathione-S-Transferase, and epoxide hydrolase enzymes: Relevance to xenobiotic metabolism and toxicity
Author(s): Wormhoudt LW; Commandeur JNM; Vermeulen NPE (REPRINT)
Corporate Source: FREE UNIV AMSTERDAM,LEIDEN AMSTERDAM CTR DRUG RES, DIV MOL TOXICOL, DEPT PHARMACOCHEM/NL-1081 HV AMSTERDAM//NETHERLANDS/ (REPRINT); FREE UNIV AMSTERDAM,LEIDEN AMSTERDAM CTR DRUG RES, DIV MOL TOXICOL, DEPT PHARMACOCHEM/NL-1081 HV AMSTERDAM//NETHERLANDS/
Journal: CRITICAL REVIEWS IN TOXICOLOGY, 1999, V29, N1, P59-124
ISSN: 1040-8444 Publication date: 19990000
Publisher: CRC PRESS INC, 2000 CORPORATE BLVD NW, JOURNALS CUSTOMER SERVICE, BOCA RATON, FL 33431
Language: English Document Type: REVIEW (ABSTRACT AVAILABLE)

...Abstract: described in which wild-type and mutant alleles of biotransformation enzymes have been expressed in **heterologous** systems to study the molecular genetics and the metabolism and pharmacological or toxicological effects of...
...Identifiers--HUMAN-LYMPHOCYTES; POLYMERASE CHAIN-REACTION; HUMAN LIVER-MICROSOMES; DEBRISOQUINE OXIDATION POLYMORPHISM; CHROMATID EXCHANGE INDUCTION; VARIANT **CYP2D6** **ALLELE** ; LUNG-CANCER PATIENTS; STATE PLASMA-LEVELS

3/K/2 (Item 2 from file: 34)
DIALOG(R)File 34:SciSearch(R) Cited Ref Sci
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04369150 Genuine Article#: RY558 No. References: 22
Title: AN UNEQUAL CROSS-OVER EVENT WITHIN THE CYP2D GENE-CLUSTER GENERATES A CHIMERIC CYP2D7/ CYP2D6 **GENE WHICH IS ASSOCIATED WITH THE POOR METABOLIZER PHENOTYPE**
Author(s): PANSERAT S; MURA C; GERARD N; VINCENTVIRY M; GALTEAU MM; JACQZAIGRAIN E; KRISHNAMOORTHY R
Corporate Source: HOP ROBERT DEBRE,INSERM,U120,48 BLVD SERURIER/F-75019 PARIS//FRANCE/; HOP ROBERT DEBRE,INSERM,U120/F-75019 PARIS//FRANCE/; HOP ROBERT DEBRE,DEPT PHARMACOL CLIN/F-75019 PARIS//FRANCE/; CNRS,URA 597,LAB CTR MED PREVENT/VANDOEUVRE NANCY//FRANCE/
Journal: BRITISH JOURNAL OF CLINICAL PHARMACOLOGY, 1995, V40, N4 (OCT), P 361-367
ISSN: 0306-5251
Language: ENGLISH Document Type: ARTICLE (Abstract Available)

Title: AN UNEQUAL CROSS-OVER EVENT WITHIN THE CYP2D GENE-CLUSTER GENERATES A CHIMERIC CYP2D7/ CYP2D6 **GENE WHICH IS ASSOCIATED WITH THE POOR METABOLIZER PHENOTYPE**
...Abstract: the CYP2D genotype and phenotype of a Caucasian family revealed that a XbaI-9 kb **allele** was associated with the poor metabolizer phenotype.
2 A Polymerase Chain Reaction (PCR)-based assay...

...the previously described mutations D6A and D6B are not associated with the XbaI-9 kb **allele** .

3 To explore the molecular basis of the poor metabolizer phenotype associated with the XbaI-9 kb **allele** , complete sequencing of the nine exons and intron-exon boundaries of the **CYP2D6** gene was undertaken after amplification by PCR.

4 All the exons were successfully amplified using **CYP2D6** gene-specific primers except exon 1 which required a combination of CYP2D7 gene-specific 5' primer and a **CYP2D6** gene-specific 3' primer.

5 Sequence data derived from this amplified product revealed that the XbaI-9 kb **allele** corresponds to a novel rearrangement of the locus. This involved a deletion of an approximately...
...Research Fronts: EPILEPSY; DEBRISOQUINE METABOLIC PHENOTYPE; ANTIEPILEPTIC DRUGS; MEPHENYTOIN OXIDATION POLYMORPHISMS; IN-VITRO MODEL)
93-4847 001 (**HETEROLOGOUS** EXPRESSION; CHROMOSOMAL DNA; GENE ENCODING METHYLMALONYL-COENZYME-A MUTASE)

3/K/3 (Item 3 from file: 34)
DIALOG(R)File 34:SciSearch(R) Cited Ref Sci

04241140 Genuine Article#: RQ649 No. References: 43
Title: COMPARISON OF SUBSTRATE METABOLISM BY WILD-TYPE CYP2D6 **PROTEIN AND A VARIANT CONTAINING METHIONINE, NOT VALINE, AT POSITION-374**
Author(s): CRESPI CL; STEIMEL DT; PENMAN BW; KORZEKWA KR; FERNANDEZSALGUERO P; BUTERS JTM; GELBOIN HV; GONZALEZ FJ; IDLE JR; DALY AK
Corporate Source: GENTEST CORP,6 HENSHAW ST/WOBURN//MA/01801; NCI,MOLEC CARCINOGENESIS LAB/BETHESDA//MD/20892; UNIV NEWCASTLE UPON TYNE,DEPT PHARMACOL SCI/NEWCASTLE TYNE NE2 4HH/TYNE & WEAR/ENGLAND/
Journal: PHARMACOGENETICS, 1995, V5, N4 (AUG), P234-243
ISSN: 0960-314X

Language: ENGLISH Document Type: ARTICLE (Abstract Available)

Title: COMPARISON OF SUBSTRATE METABOLISM BY WILD-TYPE CYP2D6 **PROTEIN AND A VARIANT CONTAINING METHIONINE, NOT VALINE, AT POSITION-374**

Abstract: We have analysed kinetic parameters of cDNA-derived **CYP2D6** proteins derived from the original **CYP2D6** cDNA isolate (Gonzalez FJ et al. Nature 1988: 331, 442-446) which contains methionine at position 374 (**CYP2D6** -Met) and a modified cDNA which contains valine at position 374 (**CYP2D6** -Val). This latter protein is predicted from the **CYP2D6** genomic sequence. Several quantitative differences, but no qualitative differences in metabolism were observed. **CYP2D6** -Met was found to have a two-fold lower K-m and a threefold lower turnover rate for (R)(+)-bufuralol 1'-hydroxylation as compared to **CYP2D6** -Val. In contrast, **CYP2D6** -Met and **CYP2D6** -Val had a similar K-m for debrisoquine 4-hydroxylation while **CYP2D6** -Val had an 18-fold higher turnover rate. **CYP2D6** -Val and **CYP2D6** -Met had similar K(m)s for metoprolol but **CYP2D6** -Val showed a three-fold higher capacity for the O-demethylation reaction compared to alpha...

...which is more similar to that seen in human liver. In the case of sparteine, **CYP2D6** -Val and **CYP2D6** -Met. showed similar capacities for formation of the 2-dehydrosparteine metabolite but the K-m value for **CYP2D6** -Met was six-fold higher than that for **CYP2D6** -Val, Kinetic differences between **CYP2D6** -Met and **CYP2D6** -Val were further probed by examination of apparent K-i for inhibition of (R,S...

...while quinidine and dextromethorphan were 8.5-fold and 21-fold more effective inhibitors of **CYP2D6** -Val relative to **CYP2D6** -Met. An **allele** specific polymerase chain reaction assay was developed for the **CYP2D6** -Met **allele** . The **CYP2D6** -Met **allele** was not found among 83 individuals, In the aggregate, these data indicated that the **CYP2D6** -Val **allele** is the more common **allele** in human populations. The quantitative kinetic differences between these two enzymes appears most pronounced for substrates/inhibitors with rigid structures. **CYP2D6** -Val more often has a substantially lower K-m and/or a substantially higher capacity...

...Research Fronts: EPILEPSY; DEBRISOQUINE METABOLIC PHENOTYPE; ANTIEPILEPTIC DRUGS; MEPHENYTOIN OXIDATION POLYMORPHISMS; IN-VITRO MODEL)

93-4847 001 (**HETEROLOGOUS** EXPRESSION; CHROMOSOMAL DNA; GENE ENCODING METHYLMALONYL-COENZYME-A MUTASE)

93-5974 001 (CYTOCHROME-P450 ACTIVITIES...

3/K/4 (Item 4 from file: 34)

DIALOG(R)File 34:SciSearch(R) Cited Ref Sci

03837170 Genuine Article#: QJ654 No. References: 18

Title: NO ASSOCIATION BETWEEN SCHIZOPHRENIA AND POLYMORPHISMS WITHIN THE GENES FOR DEBRISOQUINE 4-HYDROXYLASE (CYP2D6 **) AND THE DOPAMINE TRANSPORTER (DAT)**

Author(s): DANIELS J; WILLIAMS J; ASHERSON P; MCGUFFIN P; OWEN M

Corporate Source: UNIV WALES COLL MED,DEPT PSYCHOL MED,HEATH PK/CARDIFF CF4 4XN/S GLAM/WALES/; UNIV WALES COLL MED,DEPT PSYCHOL MED/CARDIFF CF4 4XN/S GLAM/WALES/; UNIV WALES COLL MED,DEPT MED GENET/CARDIFF CF4 4XN/S GLAM/WALES/

Journal: AMERICAN JOURNAL OF MEDICAL GENETICS, 1995, V60, N1 (FEB 27), P 85-87

ISSN: 0148-7299

Language: ENGLISH Document Type: NOTE (Abstract Available)

Title: NO ASSOCIATION BETWEEN SCHIZOPHRENIA AND POLYMORPHISMS WITHIN THE GENES FOR DEBRISOQUINE 4-HYDROXYLASE (CYP2D6) AND THE DOPAMINE TRANSPORTER (DAT)

...Abstract: association approach to test the hypothesis that mutations in the genes for debrisoquine 4-hydrogylase (**CYP2D6**) and the dopamine transporter (DAT) confer susceptibility to schizophrenia. There were no differences in **allele** or genotype frequencies between patients and controls ill the mutations causing the poor metaboliser phenotype in **CYP2D6** . In addition there was no association found between schizophrenia and a 48bp repeat within the...

...Research Fronts: OF FEAR CONCEPT; MILD HEAD TRAUMA; STATISTICAL POWER ANALYSIS; SAMPLE-SIZE PROGRAM)

93-4847 001 (**HETEROLOGOUS** EXPRESSION; CHROMOSOMAL DNA; GENE ENCODING METHYLMALONYL-COENZYME-A MUTASE)

3/K/5 (Item 5 from file: 34)

DIALOG(R)File 34:SciSearch(R) Cited Ref Sci

03827005 Genuine Article#: QJ266 No. References: 11

Title: AN INACTIVE CYTOCHROME-P450 CYP2D6 ALLELE **CONTAINING A DELETION AND A BASE SUBSTITUTION**

Author(s): DALY AK; LEATHART JBS; LONDON SJ; IDLE JR
Corporate Source: UNIV NEWCASTLE UPON TYNE,SCH MED,DEPT PHARMACOLSCI,PHARMACOGENET RES UNIT,FRAMLINGTON PL/NEWCASTLE TYNE NE2 4HH/TYNE & WEAR/ENGLAND/; UNIV SO CALIF,SCH MED,DEPT PREVENT MED,DIV OCCUPAT & PUBL HLTH/LOS ANGELES//CA/90033

Journal: HUMAN GENETICS, 1995, V95, N3 (MAR), P337-341
ISSN: 0340-6717
Language: ENGLISH Document Type: ARTICLE (Abstract Available)

Title: AN INACTIVE CYTOCHROME-P450 CYP2D6 ALLELE **CONTAINING A DELETION AND A BASE SUBSTITUTION**

Abstract: The cytochrome P450 **CYP2D6** is a polymorphic enzyme, for which 5%-10% of Caucasians (poor metabolizers) lack activity. The...

...termination of translation and a truncated protein. Tn a group of 50 white Americans, the **allele** frequency for the new mutant **allele** was 0.01. The new **allele** explains some cases of anomalous genotype/phenotype relationships for **CYP2D6** .

Research Fronts: 93-4847 001 (**HETEROLOGOUS** EXPRESSION; CHROMOSOMAL DNA; GENE ENCODING METHYLMALONYL-COENZYME-A MUTASE)

3/K/6 (Item 1 from file: 94)

DIALOG(R)File 94:JICST-EPlus

02379472 JICST ACCESSION NUMBER: 95A0704496 FILE SEGMENT: JICST-E

Identification and Detection of a New Polymorphic CYP2D6 Allele **in a Japanese Population.**

YOKOI TAKESHI (1); KOSAKA YASUYUKI (1); SENDA MICHIHIRO (1); KAMATAKI TETSUYA (1); CHIBA KAN (2); NAKAMURA HIDEFUMI (2); ISHIZAKI TAKASHI (2) ; GONZALEZ F J (3)
(1) Hokkaido Univ., Fac. of Pharm. Sci.; (2) Kokuritsukokusaiiryose; (3) NIH, USA

Yakubutsu Dotai(Xenobiotic Metabolism and Disposition), 1995, VOL.10,NO.3,

PAGE.403-406, FIG.2, TBL.1, REF.14
JOURNAL NUMBER: X0758AAJ ISSN NO: 0916-1139 CODEN: YADOE
UNIVERSAL DECIMAL CLASSIFICATION: 577.151
LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan
DOCUMENT TYPE: Journal
ARTICLE TYPE: Original paper
MEDIA TYPE: Printed Publication

Identification and Detection of a New Polymorphic CYP2D6 Allele **in a Japanese Population.**

ABSTRACT: A group of Japanese subjects was phenotyped for **CYP2D6** activity by determination of urinary metabolic ratios of sparteine. The relationship between genotypes of **CYP2D6** gene and the metabolic phenotypes was investigated in one poor metabolizer(a proband). The genotype of the proband was not consistent with any of other previously described mutations in the **CYP2D6** gene. To identify a new **allele** responsible for PM phenotype, we analyzed the **CYP2D6** gene from the proband. The results revealed a nine base insertion in exon 9, designated as 2D6(9-bp). The proband also carried the deletional 2D6(D) **allele** . The 2D6(9-bp)/2D6(D) proband thus showed reduced **CYP2D6** activity. The 2D6(9-pb) and 2D6(D) alleles of the proband were demonstrated to...

...2D6(W)/2D6(D)!, respectively. This 9-base insertion caused loss of catalytic activity of **CYP2D6** by an experiment using the enzyme expressed in yeast. Four of 308 Japanese inherited 2D6(9-bp) **allele** with **heterologous** type(0.7%, 4/616 chromosomes) examined by PCR analysis. (author abst.)

3/K/7 (Item 1 from file: 98)

04007592 H.W. WILSON RECORD NUMBER: BGSI99007592 (USE FORMAT 7 FOR FULLTEXT)
Cytochromes P450 and species differences in xenobiotic metabolism and activation of carcinogen.
Lewis, David F. V
Ioannides, Costas; Parke, Dennis V
Environmental Health Perspectives (Environ Health Perspect) v. 106 no10 (Oct. 1998) p. 633-41
SPECIAL FEATURES: bibl il ISSN: 0091-6765
LANGUAGE: English
COUNTRY OF PUBLICATION: United States
WORD COUNT: 8637

(USE FORMAT 7 FOR FULLTEXT)

TEXT:
... recent advances in molecular biological techniques that enable the stable expression of human P450s in **heterologous** systems, together with test procedures for genotyping an individual's P450 complement, point the way...
...genetic polymorphism in human ethnogeographical populations, some of which pertain to P450 enzymes such as **CYP2D6** (54) and CYP2E1 (30), for example. It is not possible to identify chemicals that may...are greater than zero, although there are exceptions, such as some CYP2D and CYP2E substrates. **CYP2D6** substrates usually possess a protonatable nitrogen atom 5-7 A from the site of metabolism...Toxicol Pharmacol 21:38-43 (1995).

54. Sachse C, Brockmoller J, Bauer S, Roots I. **Cytochrome P450 2D6** variants in a caucasian population: **allele** frequencies and phenotypic consequences. Am J Hum Genet 60:284-295 (1997).

55. Lewis DFV...

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>>>          76 is unauthorized
>>>2 of the specified files are not available
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     $0.16  Estimated cost File444
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     $1.33  TELNET
    $56.08  Estimated cost this search
   $189.37  Estimated total session cost  14.105 DialUnits


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  File 467:ExtraMED(tm) 2000/Dec
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*File 467: F467 no longer updates; see Help News467.                    7.

      Set  Items  Description
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? s (((cytochrome (w) P450 (w) 2D6) or hCYP2D6 or CYP2D6 or CYP-2D6 or (CYP
(w) 2D6)) and  heterologous)  and allele
          523248  CYTOCHROME
          182280  P450
            7900  2D6
            4389  CYTOCHROME(W)P450(W)2D6
               0  HCYP2D6
           14594  CYP2D6
               1  CYP-2D6
           28396  CYP
            7900  2D6
             855  CYP(W)2D6
          201138  HETEROLOGOUS
          377896  ALLELE
      S1      12  (((CYTOCHROME (W) P450 (W) 2D6) OR HCYP2D6 OR CYP2D6 OR
                  CYP-2D6 OR (CYP (W) 2D6)) AND  HETEROLOGOUS)  AND ALLELE
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(small (w) molecule)))
Processing
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1168771 SCREENING
3115320 COMPOUNDS
2043473 DRUGS
545425 METABOLITES
4297166 SMALL
1083356 MOLECULE
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12 S1
255022 SCREEN
1168771 SCREENING
3115320 COMPOUNDS
2043473 DRUGS
545425 METABOLITES
4297166 SMALL
1083356 MOLECULE
43764 SMALL(W)MOLECULE
S3 1 S1 AND ((SCREEN OR SCREENING) AND (COMPOUNDS OR DRUGS OR METABOLITES OR (SMALL (W) MOLECULE)))
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3/K/1 (Item 1 from file: 98)
DIALOG(R)File 98:General Sci Abs/Full-Text

04007592 H.W. WILSON RECORD NUMBER: BGSI99007592 (USE FORMAT 7 FOR FULLTEXT)
Cytochromes P450 and species differences in xenobiotic metabolism and activation of carcinogen.
Lewis, David F. V
Ioannides, Costas; Parke, Dennis V
Environmental Health Perspectives (Environ Health Perspect) v. 106 no10 (Oct. 1998) p. 633-41
SPECIAL FEATURES: bibl il ISSN: 0091-6765
LANGUAGE: English
COUNTRY OF PUBLICATION: United States
WORD COUNT: 8637

(USE FORMAT 7 FOR FULLTEXT)

ABSTRACT: The importance of cytochrome P450 isoforms to species differences in the metabolism of foreign **compounds** and activation of procarcinogens has been identified. The possible range of P450 isozymes in significant...

...significant alterations in carcinogenic response, and includes a discussion of the current procedures for toxicity **screening** , with an emphasis on short-term tests. Reprinted by permission of the publisher.

TEXT:
... large number (>400) of known rodent carcinogens (7-11), only a relatively small number of **compounds** ([similar]20-30) have been shown to be carcinogenic in humans (12, 13). This has...

...Furthermore, there are many examples of marked species differences (15) in the toxicity of foreign **compounds** , with one particular animal model representing a closer paradigm to Homo sapiens than another depending...

...toxic chemicals such as butadiene (29). CYP2E, for example, is inducible by low molecular weight **compounds** such as benzene, ethanol, acetone, carbon tetrachloride, and dichloromethane; it appears that many of the...

...meaningful comparisons between xenobiotic metabolism, and hence toxic activation/detoxication of carcinogens, and other foreign **compounds** , in humans and experimental animal species due, in part, to the differences between the P450s...recent advances in molecular biological techniques that enable the stable expression of human P450s in **heterologous** systems, together with test procedures for genotyping an individual's P450 complement, point the way...

...LONG-TERM TEST PROCEDURES
The rodent carcinogenicity bioassay (53) represents the traditional method for the **screening** of chemicals for potential toxicity and involves the use of two rodent species (rat and...

...genetic polymorphism in human ethnogeographical populations, some of which pertain to P450 enzymes such as **CYP2D6** (54) and CYP2E1 (30), for example. It is not possible to identify chemicals that may...for these species differences in carcinogenicity probably involves the relevant P450 isozymes that metabolize the **compounds** concerned. For coumarin, the major route of metabolism in humans, i.e., the 7-hydroxylation...

...chemical) provides an additional incentive to investigate complementary short-term and noninvasive methods for the **screening** of foreign **compounds** .

SHORT-TERM TEST PROCEDURES
Partly as a result of the escalating costs of life-span...

...without genotoxicity include receptor-mediated events such as those produced by peroxisome proliferators, by estrogenic **compounds** , and by chemicals such as TCDD, which are potent inducers of cytochrome P4501 (CYP1) via...these techniques can be explained in terms of the molecular or electronic structures of the **compounds** themselves (66). Furthermore, both the Ames and ENACT tests produce numerical values that allow the...

...related chemicals and in providing a means for predicting the likely activity/toxicity of untested **compounds** (68,69,76). There are several descriptor variables often found to be involved in the...

...on virtually all aspects of modern living. However, the employment of computer technology in toxicity **screening** has always been a controversial subject for various reasons (79), including a considerable suspicion of...

...testing can be extremely helpful in prescreening chemicals and for prioritization of large numbers of **compounds** for further evaluation using short-term procedures (81). Moreover, there have been many examples which ...low in hepatic tissue (85) and is apparently poorly induced by phenobarbital and other barbiturate **drugs** , which is in complete contrast

with the situation in rats, mice, and rabbits (84). Such...

...represents the most commonly used value for physiological pH. The expressions relating these quantities for **compounds** that are ionizable can be represented in the following way:
log D7.4 = log P...to both chemical safety evaluation and P450 specificity, respectively.
The decision tree approach to toxicity **screening** presented in Figure 3 has been constructed on the basis of several studies on predicting...

...hope that workers in the field will find these decision trees of use in the **screening** of chemicals for potential toxicity, where possible species differences in metabolism may be attributable in some CYP2D and CYP2E substrates. **CYP2D6** substrates usually possess a protonatable nitrogen atom 5-7 A from the site of metabolism...

...a hydrogen bond donor/acceptor atom 5-8 A from the site of metabolism. Some **compounds** can be substrates for more than one P450, especially where there is overlapping specificity. This...

...Klopman G. A re-examination of the low prevalence of carcinogens in an early carcinogen **screen** . Regul Toxicol Pharmacol 19:97-105 (1994).
12. Stoloff L. An analysis of the 1987...

...P450: Structure, Function and Mechanism. London:Taylor & Francis, 1996.
24. Ioannides C, Lewis DFV (eds). **Drugs** Diet and Disease. Volume 1: Mechanistic Approaches to Cancer. London:Ellis Horwood, 1995.
25. Ioannides...

...Mechanisms of chemical carcinogenesis and molecular parametric analysis in the safety evaluation of chemicals. In: **Drugs** , Diet and Disease. Volume 1: Mechanistic Approaches to Cancer (Ioannides C, Lewis DFV, eds). London...Toxicol Pharmacol 21:38-43 (1995).
54. Sachse C, Brockmoller J, Bauer S, Roots I. **Cytochrome P450 2D6** variants in a caucasian population: **allele** frequencies and phenotypic consequences. Am J Hum Genet 60:284-295 (1997).
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...A, Gynther J. An empirical and theoretical study on mechanisms of mutagenic activity of hydrazine **compounds**0 . Mutat Res 332:63-71 (1995).
74. Magdo I, Ferenczy GG, Bencz Z. Prediction of...

...Compadre RL, Hansch C. The importance of the hydrophobic interaction in the mutagenicity of organic **compounds** . Mutat Res 305:63-72 (1994).
79. Balls M, Bridges J, Southee J (eds). Animals...

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? s (((emulgen (w) 913) or (non-ionic (w) detergent)) and (cytochrome (w)
P450)  and (CO (w) difference (w) spectra) or (reduced (w) spectr??))
            544  EMULGEN
           7269  913
            212  EMULGEN(W)913
           1812  NON-IONIC
         145289  DETERGENT
              0  NON-IONIC(W)DETERGENT
         523248  CYTOCHROME
         182280  P450
         165643  CYTOCHROME(W)P450
        3308130  CO
        2653324  DIFFERENCE
        1103503  SPECTRA
            447  CO(W)DIFFERENCE(W)SPECTRA
```

```
         3861799  REDUCED
         2764048  SPECTR??
             965  REDUCED(W)SPECTR??
      S4     966  (((EMULGEN (W) 913) OR (NON-IONIC (W) DETERGENT)) AND
                  (CYTOCHROME (W) P450)  AND (CO (W) DIFFERENCE (W)
                  SPECTRA) OR (REDUCED (W) SPECTR??))
? s (((emulgen (w) 913)) and (cytochrome (w) P450)  and (CO (w) difference (w)
spectra) or (reduced (w) spectr??))
             544  EMULGEN
            7269  913
             212  EMULGEN(W)913
          523248  CYTOCHROME
          182280  P450
          165643  CYTOCHROME(W)P450
         3308130  CO
         2653324  DIFFERENCE
         1103503  SPECTRA
             447  CO(W)DIFFERENCE(W)SPECTRA
         3861799  REDUCED
         2764048  SPECTR??
             965  REDUCED(W)SPECTR??
      S5     966  (((EMULGEN (W) 913)) AND (CYTOCHROME (W) P450)  AND (CO
                  (W) DIFFERENCE (W) SPECTRA) OR (REDUCED (W) SPECTR??))
? s s5 not pd>000314
>>>File 24 processing for PD=000314 : PD=|
>>>    started at PD=20000315 stopped at PD=99880000
>>>File 34 processing for PD=000314 : PD=|
>>>    started at PD=20000315 stopped at PD=20050812
>>>One or more prefixes are unsupported
>>>  or undefined in one or more files.
>>>File 73 processing for PD=000314 : PD=|
>>>    started at PD=000315 stopped at PD=051119
>>>File 144 processing for PD=000314 : PD=|
>>>    started at PD=20000315 stopped at PD=20050726
Processing
Processed  10 of  29 files ...
Completed processing all files
             966  S5
        14196525  PD>000314
      S6     729  S5 NOT PD>000314
?  s s6 and (homogenate and insoluble and saturation)
             729  S6
           67935  HOMOGENATE
          142772  INSOLUBLE
          359308  SATURATION
      S7       0  S6 AND (HOMOGENATE AND INSOLUBLE AND SATURATION)
? s s6 and (((cytochrome (w) P450 (w) 2D6) or hCYP2D6 or CYP2D6 or CYP-2D6 or
(CYP (w) 2D6))
>>>Unmatched parentheses
? s s6 and (((cytochrome (w) P450 (w) 2D6) or hCYP2D6 or CYP2D6 or CYP-2D6 or
(CYP (w) 2D6)))
             729  S6
          523248  CYTOCHROME
          182280  P450
            7900  2D6
            4389  CYTOCHROME(W)P450(W)2D6
               0  HCYP2D6
           14594  CYP2D6
               1  CYP-2D6
           28396  CYP
            7900  2D6
```

```
            855  CYP(W)2D6
      S8      3  S6 AND (((CYTOCHROME (W) P450 (W) 2D6) OR HCYP2D6 OR
                 CYP2D6 OR CYP-2D6 OR (CYP (W) 2D6)))
? type s8/medium,k/all

 8/K/1     (Item 1 from file: 5)
DIALOG(R)File   5:Biosis Previews(R)
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0014207141   BIOSIS NO.: 200300165860
Effects of G169R and P34S substitutions produced by mutations of  CYP2D6
  *14 on the functional properties of  CYP2D6  expressed in V79 cells.
AUTHOR: Shiraishi Tomoko; Hosokawa Masakiyo; Kobayashi Kaoru; Tainaka
  Hitoshi; Yamaura Yoshiyuki; Taguchi Miwo; Chiba Kan (Reprint)
AUTHOR ADDRESS: Laboratory of Pharmacology and Toxicology, Graduate School
  of Pharmaceutical Sciences, Chiba University, 1-33 Yayoi-cho, Inage-ku,
  Chiba-shi, Chiba, 263-8522, Japan**Japan
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JOURNAL: Drug Metabolism and Disposition  30 (11): p1201-1205 November 2002
 2002
MEDIUM: print
ISSN: 0090-9556 _(ISSN print)
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

Effects of G169R and P34S substitutions produced by mutations of  CYP2D6
  *14 on the functional properties of  CYP2D6  expressed in V79 cells.

ABSTRACT:  CYP2D6  is a polymorphic enzyme that catalyzes the oxidation of
  various drugs. At least 40-mutant alleles of  CYP2D60  have been reported.
   CYP2D6  *14, which is one of them found in Asian populations, causes
  deficient activity of  CYP2D6 . Four amino acid substitutions, P34S,
  G169R, R296C, and S486T, are present in the protein encoded by  CYP2D6
  *14 ( CYP2D6  14). Among them, G169R is thought to be a definitive
  substitution because it is unique to  CYP2D6  14. However, a previous
  study showed that the activity of G169R-substituted  CYP2D6  was about
  40% of wild-type  CYP2D6 , suggesting that a combination of G169R and
  other substitutions may be required to abolish the activity of  CYP2D6 .
  In the present study, we examined the effects of combined substitutions
  of G169R and P34S on the functional properties of  CYP2D6  and compared
  them with those of a single substitution of G169R or P34S using a...

...The results showed that a combined substitution of G169R and P34S
  reduced the activities of  CYP2D6  to less than the detection limit of
  our analytical method for bufuralol 1'-hydroxylation and...

...simultaneous substitution of G169R and P34S is crucial for almost
  completely abolishing the activity of  CYP2D6  at least in V79 cells,
  although whether the absence of metabolism is due to the absence of
  functional protein or catalytic incompetency remains unclear because the
  levels of  CYP2D6  protein expressed in V79 cells were too low to be
  determined by difference CO- reduced  spectra .
DESCRIPTORS:
  CHEMICALS & BIOCHEMICALS:  ... CYP2D6 ;
  GENE NAME:  CYP2D6  gene


 8/K/2     (Item 1 from file: 155)
DIALOG(R)File 155:MEDLINE(R)
```

Not prior

14446807 PMID: 12386125

Effects of G169R and P34S substitutions produced by mutations of CYP2D6 ***14 on the functional properties of** CYP2D6 **expressed in V79 cells.**

Shiraishi Tomoko; Hosokawa Masakiyo; Kobayashi Kaoru; Tainaka Hitoshi; Yamaura Yoshiyuki; Taguchi Miwo; Chiba Kan

Laboratory of Pharmacology and Toxicology, Graduate School of Pharmaceutical Sciences, Chiba University, Chiba-shi, Japan.

Drug metabolism and disposition- the biological fate of chemicals (United States) Nov 2002, 30 (11) p1201-5, ISSN 0090-9556 Journal Code: 9421550

Publishing Model Print

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: MEDLINE; Completed

Effects of G169R and P34S substitutions produced by mutations of CYP2D6 ***14 on the functional properties of** CYP2D6 **expressed in V79 cells.**

CYP2D6 is a polymorphic enzyme that catalyzes the oxidation of various drugs. At least 40-mutant alleles of **CYP2D6** have been reported. **CYP2D6** *14, which is one of them found in Asian populations, causes deficient activity of **CYP2D6** . Four amino acid substitutions, P34S, G169R, R296C, and S486T, are present in the protein encoded by **CYP2D6** *14 (**CYP2D6** 14). Among them, G169R is thought to be a definitive substitution because it is unique to **CYP2D6** 14. However, a previous study showed that the activity of G169R-substituted **CYP2D6** was about 40% of wild-type **CYP2D6** , suggesting that a combination of G169R and other substitutions may be required to abolish the activity of **CYP2D6** . In the present study, we examined the effects of combined substitutions of G169R and P34S on the functional properties of **CYP2D6** and compared them with those of a single substitution of G169R or P34S using a...

... The results showed that a combined substitution of G169R and P34S reduced the activities of **CYP2D6** to less than the detection limit of our analytical method for bufuralol 1'-hydroxylation and...

... simultaneous substitution of G169R and P34S is crucial for almost completely abolishing the activity of **CYP2D6** at least in V79 cells, although whether the absence of metabolism is due to the absence of functional protein or catalytic incompetency remains unclear because the levels of **CYP2D6** protein expressed in V79 cells were too low to be determined by difference CO- **reduced spectra** .

Descriptors: *Amino Acid Substitution--physiology--PH; *Cytochrome P-450 **CYP2D6** --metabolism--ME; *Cytochrome P-450 Enzyme System--genetics--GE; *Cytochrome P-450 Enzyme System--metabolism...

Enzyme No.: EC 1.14.14.1 (Cytochrome P-450 **CYP2D6**); EC 1.14.14.1 (cytochrome P-450 CYP2C6 (Rat)); EC 1.14.99.10...

...Chemical Name: Ethanolamines; RNA, Messenger; Recombinant Proteins; Dextromethorphan; bufuralol; Cytochrome P-450 Enzyme System; Cytochrome P-450 **CYP2D6** ; cytochrome P-450 CYP2C6 (Rat); Steroid 21-Hydroxylase

8/K/3 (Item 2 from file: 155)

10375028 PMID: 8251521

Characterization of two P-450 isozymes placed in the rat CYP2D subfamily.

Ohishi N; Imaoka S; Suzuki T; Funae Y
Laboratory of Chemistry, Osaka City University Medical School, Japan.
Biochimica et biophysica acta (NETHERLANDS) Nov 28 1993, 1158 (3) p227-36, ISSN 0006-3002 Journal Code: 0217513
Publishing Model Print
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: MEDLINE; Completed

... an apparent molecular weight of 29,000 which was designated 29 k-protein. The CO- **reduced** **spectra** of both P-450 UT-7 and UT-7b showed a peak at 448 nm...
; Amino Acid Sequence; Animals; Antibodies--pharmacology--PD; Cytochrome P-450 **CYP2D6** ; Cytochrome P-450 Enzyme System--antagonists and inhibitors --AI; Cytochrome P-450 Enzyme System--isolation...
Enzyme No.: EC 1.- (Mixed Function Oxygenases); EC 1.14.14.1 (Cytochrome P-450 **CYP2D6**)
Chemical Name: Antibodies; Isoenzymes; Lidocaine; Cytochrome P-450 Enzyme System; Mixed Function Oxygenases; Cytochrome P-450 **CYP2D6**
? save temp
Temp SearchSave "TG160516393" stored
? log off
18dec05 11:19:31 User276741 Session D71.5
$5.65 0.957 DialUnits File5
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$0.16 1 Types
$5.81 Estimated cost File5
$2.06 0.333 DialUnits File24
$2.06 Estimated cost File24
$0.45 0.072 DialUnits File28
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$0.54 Estimated cost File35
$0.37 0.052 DialUnits File40
$0.37 Estimated cost File40
$0.41 0.066 DialUnits File41
$0.41 Estimated cost File41
$1.26 0.273 DialUnits File50
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$0.23 Estimated cost File65
$4.27 0.488 DialUnits File71
$4.27 Estimated cost File71
$10.22 0.961 DialUnits File73
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$0.17 0.039 DialUnits File91
$0.17 Estimated cost File91
$0.67 0.190 DialUnits File94
$0.67 Estimated cost File94
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$1.45 1 Type(s) in Format 3
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$0.37 0.060 DialUnits File136

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     $4.53  Estimated cost File144
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               $0.44  2 Type(s) in Format  3
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            $0.14    0.039 DialUnits File370
     $0.14  Estimated cost File370
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     $3.46  TELNET
    $79.33  Estimated cost this search
   $268.70  Estimated total session cost  22.635 DialUnits

Logoff: level 05.09.03 D  11:19:31

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